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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,316	05/04/2006	Tomoyuki Teramoto	M1909.1145.	5762
32172	7590	10/31/2007	EXAMINER	
DICKSTEIN SHAPIRO LLP			NGUYEN, LEE	
1177 AVENUE OF THE AMERICAS (6TH AVENUE)				
NEW YORK, NY 10036-2714			ART UNIT	PAPER NUMBER
			2618	
			MAIL DATE	DELIVERY MODE
			10/31/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/578,316	TERAMOTO, TOMOYUKI	
	<b>Examiner</b>	<b>Art Unit</b>	
	LEE NGUYEN	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1,4,6 and 12 is/are rejected.
- 7) Claim(s) 2,3,5,7-11 and 13 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The IDS filed 5/4/06 has been considered and recorded in the file.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 4, 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samuels et al. (US 6,947,710) in view of Hobrough (US 3,686,489).

Regarding claim 1, Samuels et al teach a clipping circuit for limiting amplitude of an orthogonal baseband signal to be supplied to a power amplifier in a radio transmitter, comprising polygonal clipping means (clipper/limiter, col. 4, line 40), comprising rectangular clipping means and phase rotating means 320 (fig. 3) connected in series (rectangular, col. 3, line 67, clip directly, col. 4, lines 39-45, rotate, phase shift, col. 4, lines 54-56). Samuels et al fail to teach only one stage of clipping. They fail to teach

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including a plurality of stages in cascade connection. Hobrough teaches that a plurality of limiter can be connected in series (col. 1, lines 65-68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Hobrough with Samuels et al in order to provide rapid limiting of input signal in a single pass through system.

Regarding claim 4, Samuels et al also teach comprising control means for controlling, if the amplitude of the orthogonal baseband signal takes a value more than the predetermined clip level, the polygonal clipping means to process the orthogonal baseband signal (col. 4, lines 4-10).

Regarding claim 6, Samuels et al also teach a transmitter (col. 3, lines 61-64).

Regarding claim 12, the claim is interpreted and rejected for the same reason as set forth in claim 6.

#### ***Allowable Subject Matter***

5. Claims 2-3, 5, 7-11 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 2, the prior art of record fail to teach comprising amplitude adjusting means for compensating and adjusting a change in signal amplitude of the baseband signal from the rectangular clipping means and the phase rotating means.

Regarding claim 3, the prior art of record fail to teach the rectangular clipping means in a first stage including a clip level beforehand set to a predetermined clip level, each of the rectangular clipping means in a second and subsequent stages including a clip level set to a value obtained by multiplying the predetermined clip level by a quantity of correction corresponding to variation in amplitude of the baseband signal associated with phase rotation in the phase rotating means in a previous stage of the rectangular clipping means.

Regarding claim 5, the prior art of record fail to teach that if the amplitude of the orthogonal baseband signal takes a value equal to or less than the predetermined clip level, the control means adjusts time for output of the orthogonal baseband signal corresponding to processing time of the polygonal clipping means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEE NGUYEN whose telephone number is 571-272-7854. The examiner can normally be reached on 8:00 - 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANDERSON D. MATTHEW can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LEE NGUYEN  
Primary Examiner  
Art Unit 2618